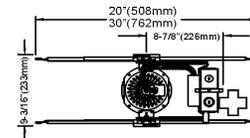
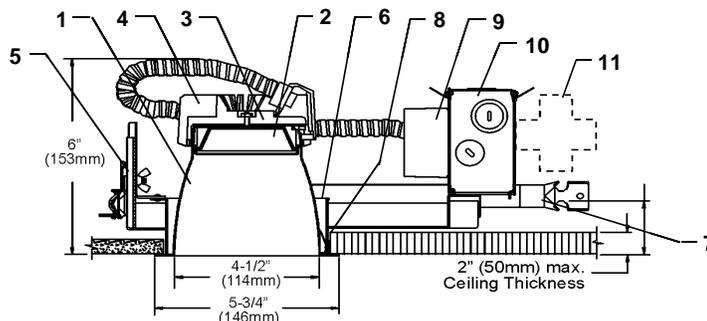


## Downlight

Ceiling Opening: 5-1/4" (133mm)



Flangeless Trim with Plaster Ring Accessory



For complete fixture order: Trim Kit + Frame-In Kit. Sold Separately.

Light Engine	Lumen*	CCT	Basic Finish	Frame-in Kit	Wattage	Input Voltage
<b>C4L05DL27K</b>	500lm	2700K	<b>CCLW</b> Comfort Clear /	<b>C4L05N1</b>	10W	120V
<b>C4L05DL30K</b>	500lm	3000K	White Painted Integral Flange	<b>C4L05N2</b>	10W	277V
<b>C4L05DL35K</b>	500lm	3500K		<b>C4L05N1-347*</b>	10W	347V*
<b>C4L05DL40K</b>	500lm	4000K		<b>C4L10N1</b>	20W	120V
<b>C4L10DL27K</b>	1000lm	2700K	See Options for other finish	<b>C4L10N2</b>	20W	277V
<b>C4L10DL30K</b>	1000lm	3000K		<b>C4L10N1-347*</b>	20W	347V*
<b>C4L10DL35K</b>	1000lm	3500K				
<b>C4L10DL40K</b>	1000lm	4000K				
<b>ex: C4L05DL30KCLFT+</b>	500lm	3000K	Comfort Clear / Flangeless			

Add "LD" for Lutron dimming available only for 20W frame  
**ex: C4L10N1LD**  
 Add "Z10V" for 0-10V dimming **ex: C4L05N1Z10V**

**\* With Step-Down transformer**

**\*Nominal value. Consult the photometry for the exact value.**  
**Note: Select Frame-in Kit and Light engine of the same wattage.**

### Features

- Aperture Cone:** Provides 50° visual cutoff to source and image. Self-flanged in painted white, aperture-matching polished, or flush-mount minimal flange.
- Optical Mixing Chamber:** Patented remote phosphor technology provides increased efficiency and color stability. Phosphor lens assembly positioned in front of LED array converts blue light to white and produces a wide even pattern of diffused light without bright spots created by individual LEDs. Uniform phosphor coating provides consistent, stable color with a shift of no more than +/- 100K over life. Mixing chamber redirects scattered light back out through the emitting aperture.
- LED Board:** Array of 16 high brightness royal blue LEDs 1000lm or 8 for 500lm.
- Thermal Management:** Proprietary heat sink design maintains junction temperature for consistent, reliable performance and 50,000 hour lifetime at 70% lumen maintenance.
- Mounting Frame:** 0.048" (18-ga) galvanised steel. Vertical adjustment mechanism accommodates mounting to virtually any ceiling system using mounting bars (provided, or 1/2" EMT tubing (by others). Single locking features secures all adjustments. Alignment holes and markings allow fixture to be preset prior to installation.
- Mounting Ring:** 0.048" (18ga) galvanised steel. Designed for vertical adjustment from above or below for ceilings from 0" to 2" thick. Center-line notches allow consistent alignment of multiple fixtures.
- Mounting Bars:** 0.048" (18 ga) pre-installed, telescoping bars extend to 30" long and lock securely into position. Built-in locking tabs provide positive attachment to common T-bar systems. Self-centering features simplifies installation in 24" O.C. grid systems. Attaches to steel or wood joists without accessories.
- Retaining Springs:** Rust resistant springs simplify reflector/housing removal for inspection and maintenance.
- Power Supply:** Die-cast aluminum PSU enclosure. Assembly snaps onto junction box without tools for inspection and replacement, accessible from below. Attaches to light engine via push-in connector on LED board, removable cover provides access.
- Junction Box:** 0.059" (16 ga) galvanised steel. UL listed for 8 No. 12 AWG, 90° C through branch circuit conductors. Allows inspection from below.
- Step-down Transformer:** From 347V to 120V.
- Thermal Protector:** Protect against unauthorized use of insulation.

**Electronic Driver:** 120V or 277V 50/60 Hz.; overload and short circuit protected; thermal regulation to protect against overheating; sound rating "A"; -20°C (-4°F).

Nominal Wattage	Input Voltage	Input Frequency	Input Current	LED drive Current	Input Power ± 5%	THD	Power Factor
10W	120V	50/60Hz	0.083	350mA	10W	<5%	>0.9
	277V	50/60Hz	0.036	350mA	10W	<10%	>0.8
	347V*	60Hz	0.050	350mA	13W	<5%	>0.7
20W	120V	50/60Hz	0.167	350mA	20W	<5%	>0.9
	277V	50/60Hz	0.072	350mA	20W	<10%	>0.8
	347V*	60Hz	0.080	350mA	24W	<5%	>0.8

### Options

Dimming- Capacity: See LED-DIM specification sheet.

For availability, consult your Lightolier representative.

- CCDFT+** Comfort Clear Diffuse / Flangeless
- CCDP** Comfort Clear Diffuse / Polished Integral Flange
- CCDW** Comfort Clear Diffuse / White Painted Integral Flange
- CCLFT+** Comfort Clear / Flangeless
- CCLP** Comfort Clear / Polished Integral Flange
- CCZFT+** Comfort Champagne Bronze / Flangeless
- CCZP** Comfort Champagne Bronze / Polished Integral Flange
- CCZW** Comfort Champagne Bronze / White Painted Integral Flange
- WHFT+** White / Flangeless
- WHW** White / White Painted Integral Flange

**+ Accessory Ring CA4FMR recommended.**

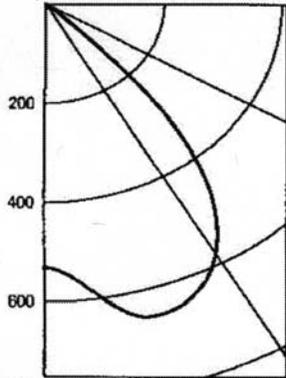
### Markings

cULus Listed, suitable for wet locations.

Job Information	Type:
<b>Job Name:</b>	
<b>Cat. No.:</b>	
<b>Lamp(s):</b>	
<b>Notes:</b>	

20W LED, 3000K, CL FINISH TRIM

Candlepower Distribution



ANGLE	MEAN CP	LUMENS
0	577	
5	595	59
10	647	
15	693	194
20	692	
25	665	304
30	611	
35	529	325
40	405	
45	188	146
50	15	
55	4	5
60	2	
65	1	1
70	1	
75	0	0
80	0	
85	0	0
90	0	

CERTIFIED TEST REPORT NO. 15735<sup>2</sup>

**Single Unit Data**

Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	23	7'
6'	16	9'
7'	12	10'
8'	9	12'
9'	7	13'

**Multiple Unit Data - (RCR 2)**

Spacing	Initial Footcandles	Watts/Sq. Ft.
5'	46	0.88
6'	30	0.58
7'	22	0.41
8'	18	0.34
9'	15	0.27

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

**ZONAL LUMENS AND PERCENTAGES**

ZONE	LUMENS	%LUMINAIRE
0-30	557	53.9%
0-40	882	85.3%
0-60	1033	99.9%
0-90	1034	100.0%

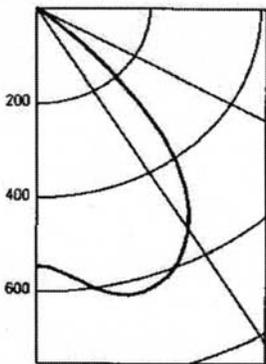
**Coefficients of Utilization**

CEILING	80%				70%		50%		30%		0%
	70	50	30	10	50	10	50	10	50	10	0
WALL	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	113	110	107	105	108	103	104	100	100	97	92
2	107	101	97	93	100	92	96	90	93	88	85
3	100	93	88	83	92	83	89	81	87	80	77
4	94	86	80	75	85	75	83	74	81	73	70
5	89	79	73	68	78	68	77	67	75	67	64
6	83	73	67	62	73	62	71	61	70	61	59
7	79	68	61	57	67	56	66	56	65	56	54
8	74	63	56	52	63	52	61	52	60	51	50
9	70	59	52	48	58	48	57	48	56	47	46
10	66	55	48	44	54	44	54	44	53	44	42

Trim: C4L10DL30KCLW  
 Output lumens: 1034lm  
 Correlated Color Temp<sup>1</sup>: 3000K  
 Input Watts<sup>2</sup>: 19.8W  
 Efficacy: 52.2lm/W  
 CR<sup>3</sup>: 79  
 Spacing Criterion: 1.3

20W LED, 3000K, CCL FINISH TRIM

Candlepower Distribution



ANGLE	MEAN CP	LUMENS
0	594	
5	606	59
10	643	
15	670	188
20	693	
25	630	288
30	572	
35	534	300
40	367	
45	185	146
50	46	
55	15	17
60	8	
65	4	5
70	2	
75	1	1
80	1	
85	0	0
90	0	

CERTIFIED TEST REPORT NO. F09303<sup>3</sup>

**Single Unit Data**

Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	24	7'
6'	17	8'
7'	12	10'
8'	9	11'
9'	7	12'

**Multiple Unit Data - (RCR 2)**

Spacing	Initial Footcandles	Watts/Sq. Ft.
5'	45	0.88
6'	30	0.58
7'	21	0.41
8'	18	0.34
9'	14	0.27

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

**ZONAL LUMENS AND PERCENTAGES**

ZONE	LUMENS	%LUMINAIRE
0-30	536	53.3%
0-40	836	83.2%
0-60	998	99.4%
0-90	1004	100.0%

**Coefficients of Utilization**

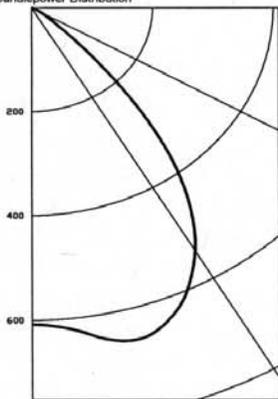
CEILING	80%				70%		50%		30%		0%
	70	50	30	10	50	10	50	10	50	10	0
WALL	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	119	119	119	119	116	116	111	111	107	107	100
1	113	110	107	105	108	103	104	100	100	97	92
2	106	101	96	93	99	92	96	90	93	88	84
3	100	93	87	83	91	82	89	81	86	80	77
4	94	86	79	75	84	74	82	73	80	72	70
5	88	79	72	67	78	67	76	67	74	66	64
6	83	73	66	61	72	61	71	61	69	60	58
7	78	68	61	56	67	56	66	56	64	55	53
8	74	63	56	51	62	51	61	51	60	51	49
9	69	58	52	47	58	47	57	47	56	47	45
10	65	54	48	44	54	44	53	43	52	43	42

Trim: C4L10DL30KCLW  
 Output lumens: 1004lm  
 Correlated Color Temp<sup>1</sup>: 3000K  
 Input Watts<sup>2</sup>: 19.8W  
 Efficacy: 50.7lm/W  
 CR<sup>3</sup>: 79  
 Spacing Criterion: 1.2

<sup>1</sup>Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
<sup>2</sup>Wattage controlled to within ± 5%.  
<sup>3</sup>Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.  
<sup>4</sup>Color Rendering Index within +/- 2%.

20W LED, 3000K, CCD FINISH TRIM

Candlepower Distribution



ANGLE	MEAN CP	LUMENS
0	609	
5	617	60
10	643	
15	660	165
20	644	
25	604	276
30	540	
35	451	277
40	332	
45	185	146
50	77	
55	36	36
60	20	
65	12	12
70	7	
75	4	4
80	2	
85	1	1
90	0	

CERTIFIED TEST REPORT NO. F09304<sup>2</sup>

Single Unit Data

Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	24	6'
6'	17	8'
7'	12	9'
8'	10	10'
9'	8	12'

Multiple Unit Data - (RCR 2)

Spacing On Ctr.	Initial Footcandles	Watts/Sq. Ft.
5'	44	0,88
6'	29	0,58
7'	21	0,41
8'	17	0,34
9'	14	0,27

38x38x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	%LUMINAIRE
0-30	521	52,2%
0-40	798	80,0%
0-60	980	98,3%
0-90	997	100,0%

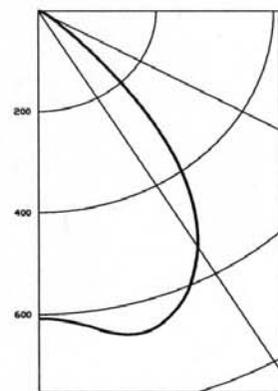
Coefficients of Utilization

CEILING	80%			70%			50%			30%			0%		
WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%														
0	119	119	119	119	116	116	111	111	107	107	107	107	107	107	100
1	113	110	107	104	107	103	103	99	100	96	92	87	83	79	71
2	106	100	96	92	99	91	95	89	92	87	83	79	71	69	62
3	100	92	86	82	91	81	88	80	85	79	76	71	69	62	57
4	93	85	78	73	83	73	81	72	79	71	69	62	57	52	48
5	88	78	71	66	77	66	75	65	73	65	62	57	52	48	44
6	82	72	65	60	71	60	70	59	68	59	57	52	48	44	40
7	77	67	60	55	66	55	65	54	63	54	52	48	44	40	36
8	73	62	55	50	61	50	60	50	59	50	48	44	40	36	32
9	69	58	51	46	57	46	56	46	55	46	44	40	36	32	28
10	65	54	47	43	53	43	52	43	52	42	40	36	32	28	24

Trim: C4L10DL30KCCDW  
 Output lumens: 997lm  
 Correlated Color Temp<sup>1</sup>: 3000K  
 Input Watts<sup>2</sup>: 19,6W  
 Efficacy: 50,4lm/W  
 CRI<sup>3</sup>: 79  
 Spacing Criterion: 1,2

20W LED, 4000K, CL FINISH TRIM

Candlepower Distribution



ANGLE	MEAN CP	LUMENS
0	611	
5	646	64
10	716	
15	769	216
20	770	
25	742	339
30	684	
35	593	364
40	455	
45	209	162
50	16	
55	5	5
60	3	
65	1	1
70	1	
75	0	0
80	0	
85	0	0
90	0	

CERTIFIED TEST REPORT NO. 15736<sup>3</sup>

Single Unit Data

Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	24	7'
6'	17	9'
7'	12	10'
8'	10	12'
9'	8	13'

Multiple Unit Data - (RCR 2)

Spacing On Ctr.	Initial Footcandles	Watts/Sq. Ft.
5'	52	0,88
6'	34	0,58
7'	24	0,41
8'	20	0,34
9'	16	0,27

38x38x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	%LUMINAIRE
0-30	619	53,7%
0-40	983	85,3%
0-60	1151	99,9%
0-90	1153	100,0%

Coefficients of Utilization

CEILING	80%			70%			50%			30%			0%		
WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%														
0	119	119	119	119	116	116	111	111	106	106	106	106	106	106	100
1	113	110	107	105	108	103	104	100	100	97	92	88	84	80	77
2	107	101	97	93	99	92	96	90	93	88	84	80	77	71	64
3	100	93	88	83	92	83	89	81	87	80	77	71	64	59	54
4	94	86	80	75	85	75	83	74	80	73	70	64	59	54	50
5	89	79	73	68	78	68	77	67	75	66	64	59	54	50	46
6	83	73	67	62	73	62	71	61	70	61	59	54	50	46	42
7	78	68	61	57	67	56	66	56	65	56	54	50	46	42	38
8	74	63	56	52	63	52	61	51	60	51	49	46	42	38	34
9	70	59	52	48	58	48	57	47	56	47	46	42	38	34	30
10	66	55	48	44	54	44	53	44	53	44	42	38	34	30	26

Trim: C4L10DL30KCLW  
 Output lumens: 1154lm  
 Correlated Color Temp<sup>1</sup>: 4000K  
 Input Watts<sup>2</sup>: 19,6W  
 Efficacy: 58,3lm/W  
 CRI<sup>3</sup>: 76  
 Spacing Criterion: 1,3

<sup>1</sup>Correlated Color Temperature within specs as defined in ANSI/NEMA/ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
<sup>2</sup>Wattage controlled to within ±5%.  
<sup>3</sup>Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.  
<sup>4</sup>Color Rendering Index within +/- 2%.